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REMARKS**STATUS OF CLAIMS**

Claims 1-17 have been pending.

Claims 1-3, 9-11, 13-16 are objected to for Informalities. Page 2, Item 2, of the Office Action.

Claims 1, 2, 9, and 10 are rejected under 35 USC 112, second paragraph, for being indefinite.

Claim 9 is allowed, if amended or rewritten to overcome the objections and the indefiniteness rejections.

Claims 2 and 11 are rejected under 35 USC 112, first paragraph, for non-enablement, because the claim language "that is generated in processes from design, development, manufacture, and inspection, of a product," is different from the written description in the specification page 17, lines 20-22. Page 3, item 4, of the Office Action.

Claims 1-8, 10-11, and 13-14 are rejected under 35 USC 102(e) as being anticipated by Van Huben (US Patent No. 5,826,265). Van Huben is newly cited, and, thus, newly relied upon.

Claims 12 and 15-17 are rejected under 35 USC 103(a) as being unpatentable over Van Huben in view of Call (US Patent No. 6,154,738).

Claims 3, 12, 13 and 17 are cancelled without disclaimer or prejudice, and claims 1-2, 4-11 and 14-16 are amended.

Thus, claims 1-2, 4-11, and 14-16 would remain pending for reconsideration, which is respectfully requested.

No new matter has been added in this Amendment. The foregoing rejections are hereby traversed.

ALLOWED CLAIM 9

Allowed claim 9 is amended to overcome the objections thereto and the 35 USC 112, second paragraph, rejection, taking into consideration the Examiner's comments. Withdrawal of the claim 9 objections and indefiniteness rejection is respectfully requested.

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CLAIM OBJECTIONS AND 35 USC 112, SECOND PARAGRAPH, REJECTIONS

Claims 1-2, 4-11 and 14-16 are amended, taking into consideration the Examiner's comments, to overcome the objections and the indefiniteness rejections, such as by replacing the term "electronized" with "electronic Information." Withdrawal of the claim objections and indefiniteness rejections is respectfully requested.

35 USC 112, FIRST PARAGRAPH, REJECTION OF CLAIMS 2 and 11

Claims 2 and 11 are rejected under 35 USC 112, first paragraph, for non-enablement, because the claim language "that is generated in processes from design, development, manufacture, and inspection, of a product," is different from the written description in the specification page 17, lines 20-22. However, page 17, lines 20-25, of the present Application expressly provides a written description of the invention as follows:

The component means a thing which is *generated in processes from the development/design* of a product to the manufacture thereof and can be electronized, such as the drawing of a hardware constituting the product, a firmware, various kinds of programs, a specification, a contract document, and the like (emphasis added).

Claim 2 recites:

2. (CURRENTLY AMENDED) A component management device comprising:

a storage unit storing hardware and firmware related electronic information components as a hardware and firmware component knowledge database, each hardware and firmware related electronic information component being electronized electronic information that is generated in processes from including design, development, manufacture, and inspection, of a product product, ...

Clearly, one skilled in the art would understand that in the present invention an electronic information component is data generated during product development or in processes of product development, such as a drawing drawn by a draftsman, source code written by a programmer, etc. Further, one skilled in the art would understand how an electronic information component can be generated, for example, by using software to create a drawing file, create a source code file, etc., related to manufacturing a product. As far as the word "inspection" recited in claim 2, but not used in page 17, lines 20-25, of the specification, at least this term was recited in the original claims as filed, thereby providing support as part of the specification and further, page 1, lines 16-24, of the present Application discloses that an

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inspection process is part of the manufacturing business, which would also be understood by one skilled in the art.

Therefore, withdrawal of the 35 USC 112, first paragraph, rejection is respectfully requested.

35 USC 102(e) REJECTION

Claims 1-8, 10-11, and 13-14 are rejected under 35 USC 102(e) as being anticipated by Van Huben (US Patent No. 5,826,265). Therefore, the independent claims 1, 2, 10 and 11 are rejected as being anticipated by Van Huben.

The independent claims 1, 2, 10 and 11 are amended to incorporate the patentably distinguishing features of dependent claims 3, 12 and 13. Dependent claims 3, 12, 13 and 17 are cancelled without disclaimer or prejudice. The present claimed invention is patentably distinguishing over Van Huben, as follows:

First, Van Huben's levels are working levels, such as engineering, release, etc. (column 16, lines 16-21; column 17, lines 37-39). But contrary to the Examiner's suggestion that Van Huben's levels are similar to the present invention's levels, in the present claimed invention the levels are for various component types (page 19, lines 7-9, of the present Application).

Second, the Examiner rejects the recitation, "meta-information ... expressing the hierarchical structure," in cancelled dependent claim 3 and incorporated in amended claim 1, by relying on Van Huben's libraries (private and public), which hold the actual pieces of design under the control of the system (see Abstract and column 14, lines 55-56), by relying on Van Huben's hierarchical Models based upon the libraries (i.e., FIG. 77, Van Huben, column 86, line 11 to column 88, line 3; column 88, lines 36-37; column 89, lines 23-24; and FIGS. 2, 75-77, which disclose: "a Model consists of one Anchor and one or more Components. Together, the Anchor and Components comprise the members of the Model ...;" "Anchors of one Model can be a Component of another Model, thereby creating hierarchical models;" and "... Components any of which may be an Anchor to a lower level Model"), and by relying on the setting up of the Model using a tree. See, page 6, of the Office Action, regarding the rejection of dependent claim 3. The Examiner appears to assert that in Van Huben, column 96, lines 13-20, the Luther Woodrum's Radix Partitioned Tree Services that use a priority key related to the model nesting level that is associated with each "model" tree entry, is similar to the present invention's "meta-information ... expressing the hierarchical structure of the hardware and firmware related electronic information components" (amended claim 1). For example, the Examiner asserts

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that in Van Huben the model_ref (pointer to model as shown in Table 18 in column 94) is meta-information. Further, the Examiner appears to rely on a library structure in FIG. 102 of Van Huben.

However, the Applicants do not agree with the Examiner regarding Van Huben disclosing or suggesting "meta-information." First, a search of Van Huben reveals that FIGS. 102 (and 101) are not discussed anywhere, so that FIGS 101 and 102 cannot alone anticipate the present invention's "meta-information ... expressing the hierarchical structure of the hardware and firmware related electronic information components," because Van Huben is silent on describing the information in the table of FIG. 102 as expressing a hierarchical structure of anything.

Second, a search of Van Huben reveals that the term "meta-information" is not recited anywhere.

Third, even if one characterized Van Huben's model tree priority key and/or model_ref to be similar to the present invention's "meta-information ... expressing the hierarchical structure of the hardware and firmware related electronic information components," Van Huben cannot anticipate the present invention's "meta-information," as follows. Van Huben's model tree priority key and/or model_ref are not the same as the present invention's "meta-information ... expressing the hierarchical structure of the hardware and firmware related electronic information components," because the model tree priority key is only a key to traverse/navigate through a tree, so that each priority key by itself does not serve as metadata by not describing a hierarchical structure of hardware and firmware related electronic information components. Further, in Van Huben, the model_ref is a pointer to a model file as shown in Table 18, column 94, so that the model_ref does not serve as metadata by not describing a hierarchical structure of hardware and firmware related electronic information components.

For example, in contrast to Van Huben, the present claimed invention as recited in amended independent claims 1, 2, 10 and 11, using claim 1 as an example, provides meta-information as "wherein said hardware and firmware related electronic information components as a plurality of electronic information generated during the processes including the design, development, manufacture and inspection of the product constitute a hierarchical structure in which the hardware and firmware related electronic information components are stored according to a numbering system common to both hardware and firmware electronic information components and added to each hardware and firmware electronic information component." Van Huben's tree priority key and/or model_ref do not disclose or suggest the

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present invention's patentably distinguishing feature, "a numbering system common to both hardware and firmware electronic information components and added to each hardware and firmware electronic information component" (amended claim 1).

The Examiner also relies on Call for rejecting the dependent claim 12, which recites using XML to define meta-information. However, Call's XML data describe converted product information, as follows: "storing cross-references between universal product codes identifying specific products and Internet addresses specifying the locations at which information about these products can be obtained" (column 1, lines 62-65 and column 2, lines 4-11, which is relied upon by the Examiner). In contrast to Call, the present claimed invention's XML data defines "meta-information according to Extensible Markup Language (XML) data expressing the hierarchical structure of the hardware and firmware related electronic information components" (amended claim 1).

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The present invention as recited in amended independent claims 1, 2, 10 and 11, using claim 1 as an example, is patentably distinguishing over Van Huben and Call, as follows:

1. (CURRENTLY AMENDED) A component management system comprising:

a storage unit storing hardware and firmware related electronic information components as a hardware and firmware component knowledge database, each hardware and firmware related electronic information component being electronic information generated during processes including design, development, manufacture, and inspection, of a product,

wherein the hardware and firmware related electronic information components include at least one of a drawing of a hardware constituting the product, a firmware, a program, a specification, and a contract for the product, as the electronic information,

wherein said hardware and firmware related electronic information components as a plurality of electronic information generated during the processes including the design, development, manufacture and inspection of the product **constitute a hierarchical structure in which the hardware and firmware related electronic information components are stored according to a numbering system common to both hardware and firmware electronic information components and added to each hardware and firmware electronic information component,**

wherein said storage unit stores **meta-information according to Extensible Markup Language (XML) data expressing the hierarchical structure of the hardware and firmware related electronic information components,** and

wherein said hardware and firmware related electronic information components constituting said product are at a same management level;

a server which manages the hardware and firmware component knowledge database stored in said storage unit; and

at least one client, which is connected to said server via a network, and **takes out from said storage unit a desired hardware and firmware related electronic information component from among said plurality of hardware and firmware related electronic information components constituting the hierarchical structure based on the meta information** (emphasis added).

Withdrawal of the 35 USC 102(e) rejection over Van Huben, including any 35 USC 103(a) rejection over Van Huben and Call, is respectfully requested.

CONCLUSION

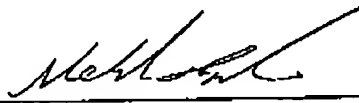
In view of the claim amendments and the remarks, withdrawal of the objections and rejections of the pending claims, and allowance of the pending claims is respectfully requested.

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Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
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on June 3, 2004

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Date June 3, 2004